

## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Yu X-J, Liang M-F, Zhang S-Y, et al. Fever with thrombocytopenia associated with a novel bunyavirus in China. *N Engl J Med* 2011;364:1523-32. DOI: 10.1056/NEJMoa1010095.

## **Supplementary data**

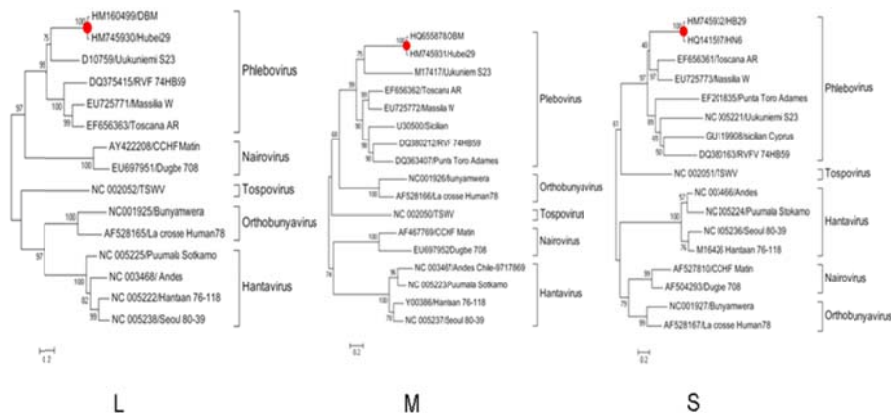
### **Authors' contributions:**

X-J Yu discovered and characterized the novel virus SFTSV; M-F Liang coordinated laboratory manipulation, serological diagnosis and all data analysis; S-Y Zhang, Y Liu, J-D Li, Y-L Sun, L-H Zhang did viral genome detection sequencing and genetic analysis. Q-F Zhang, C Li, R Hai did viral isolation and analysis, W Wu and F-S Zhang did serological analysis and neutralization tests; J. Qu, J. Lu, L-N Sun, did all samples molecular diagnosis. Q Li, Y-P Zhang, Q Wang, F-X Zhang, ZQ- Bi, G-F Liu, X-J Wang, B-Kan, K-L Wan, S-W Wang, H-Q Jin, W-W Yin, H Zhou, B-L Xu, H Wang, J Ren, Z Zhuo, J-F Liu coordinated or involved in patients identification, samples collections, and clinical data collections. V-L Popov, J. Song and T. Hong did electron micrographic analysis of the virus. W Wu, J-R He, T Wang, J-S Zhang, X-P Fu, did viral antigens preparation and protein purification; X-P Dong, Z-J Feng, W-Z Yang consulted study design, implementation, data analysis; David H. Walker was a consultant on the probability of virus infection and helped to revise the paper; Y. Wang and D-X Li are the project coordinators, responsible for the project design, implementation, and oversaw all aspects of case definition, fieldwork, clinical data analysis and laboratory activities.

## Supplementary Figure 1

### Phylogenetic trees relating SFTS virus to other bunyaviruses

The phylogenetic trees were generated by MEGA4 ([www.megasoftware.net](http://www.megasoftware.net)) from aligned complete nucleotide sequences of L, M and S segments from 3 SFTS virus isolates (Strains DBM, HB29 and HN6) and other representative bunyaviruses of the genera *Orthobunyavirus*, *Phlebovirus*, *Nairovirus*, *Hantavirus*, and *Tospovirus* in the family of *Bunyaviridae*. The complete sequences were analyzed with the neighbor-joining method using complete-deletion and maximum composite likelihood options. Each sequence is identified with GenBank accession number followed by virus name according to the International Committee on Taxonomy of Viruses.



**Supplementary Table 1. GenBank accession numbers of complete genomic sequences of SFTS virus isolates**

Provinces	Strains	L	M	S
Hubei	HB29	HM745930	HM745931	HM745932
Shandong	SD24	HM802200	HM802201	HM802205
	SD4	HM802202	HM802203	HM802204
Henan	DBM*	HM160499	HQ655878	HM160498
	HN6	HQ141595	HQ141596	HQ141597
	HN13	HQ141598	HQ141599	HQ141600
Jiangsu	JS3	HQ141601	HQ141602	HQ141603
	JS4	HQ141604	HQ141605	HQ141606
Anhui	AH12	HQ116417	HQ141590	HQ141591
	AH15	HQ141592	HQ141593	HQ141594
Liaoning	LN2	HQ141607	HQ141608	HQ141609
	LN3	HQ141610	HQ141611	HQ141612

\* Partial Sequences

**Supplementary Table 2: Amino acid sequence similarity (%) between SFTS virus and representative phleboviruses**

Proteins	Strains	*RVFV/74HB59	Massila/W	PTV/Adames	SFV/Sicilian	Toscana/AR	UUK/S23	SFTS/ HB29
<b>RdRp</b>	RVF/74HB59	100.0	54.4	***	***	54.4	37.2	33.0
	Massila/W		100.0			83.3	36.0	32.2
	Toscana/AR					100.0	36.0	31.9
	UUK/S23						100.0	33.1
	SFTS/ HB29							100.0
<b>M</b>	RVF/74HB59	100.0	35.1	40.5	38.9	36.2	30.9	30.8
	Massila/W		100.0	33.8	31.6	57.6	21.8	21.4
	PTV/Adames			100.0	38.3	33.1	23.4	23.1
	SFV/Sicilian/				100.0	31.5	22.0	21.4
	Toscana/AR					100.0	22.3	19.8
	UUK/S23						100.0	36.1
	SFTS/ HB29							100.0
<b>N</b>	RVF/74HB59	100.0	49.6	56.1	53.8	50.0	37.1	41.4
	Massila/W		100.0	50.6	43.8	85.4	30.8	35.1
	PTV/Adames			100.0	50.0	52.6	35.7	38.2
	SFV / Sicilian				100.0	43.8	34.7	38.5
	Toscana/AR					100.0	29.2	34.3
	UUK/S23						100.0	29.5
	SFTS/ HB29							100.0
<b>NSs</b>	RVF/74HB59	100.0	16.0	21.8	26.8	17.7	9.3	11.5
	Massila/W		100.0	12.6	14.7	45.9	8.6	16.0
	PTV/Adames			100.0	21.6	13.4	9.7	11.8
	SFV/ Sicilian				100.0	17.6	11.9	11.2
	Toscana/AR					100.0	9.4	14.9
	UUK/S23						100.0	13.7
	SFTS/ HB29							100.0

\*RVF: Rift valley fever virus; PTV: Punta Toro virus; SFV: sandfly fever virus:

UUK: Uukuniemi virus; SFTS: severe fever and thrombocytopenia syndrome

virus